

FIG. 1

$$H_{LDPC} = \begin{pmatrix} 1 & 0 & 0 & 1 & 1 & 1 & 0 & 0 \\ 0 & 1 & 1 & 0 & 1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 & 0 & 1 & 0 & 1 \\ 0 & 1 & 0 & 1 & 0 & 0 & 1 & 1 \end{pmatrix}$$

FIG. 2

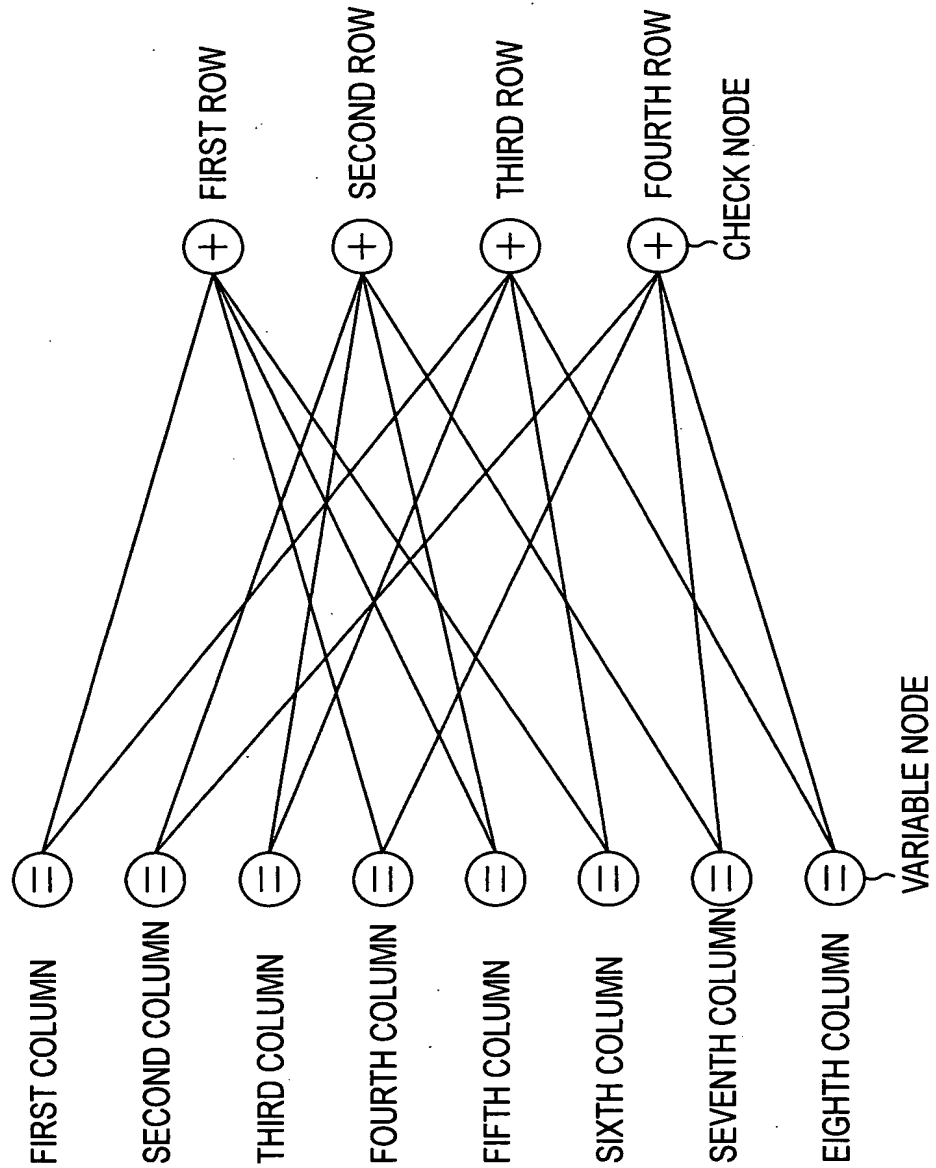


FIG. 3

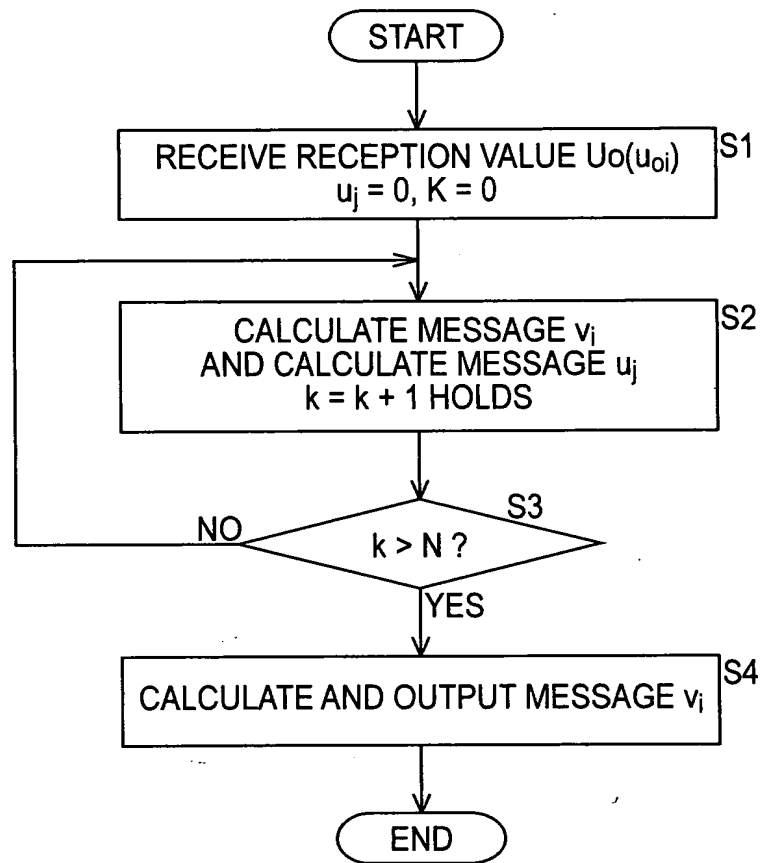
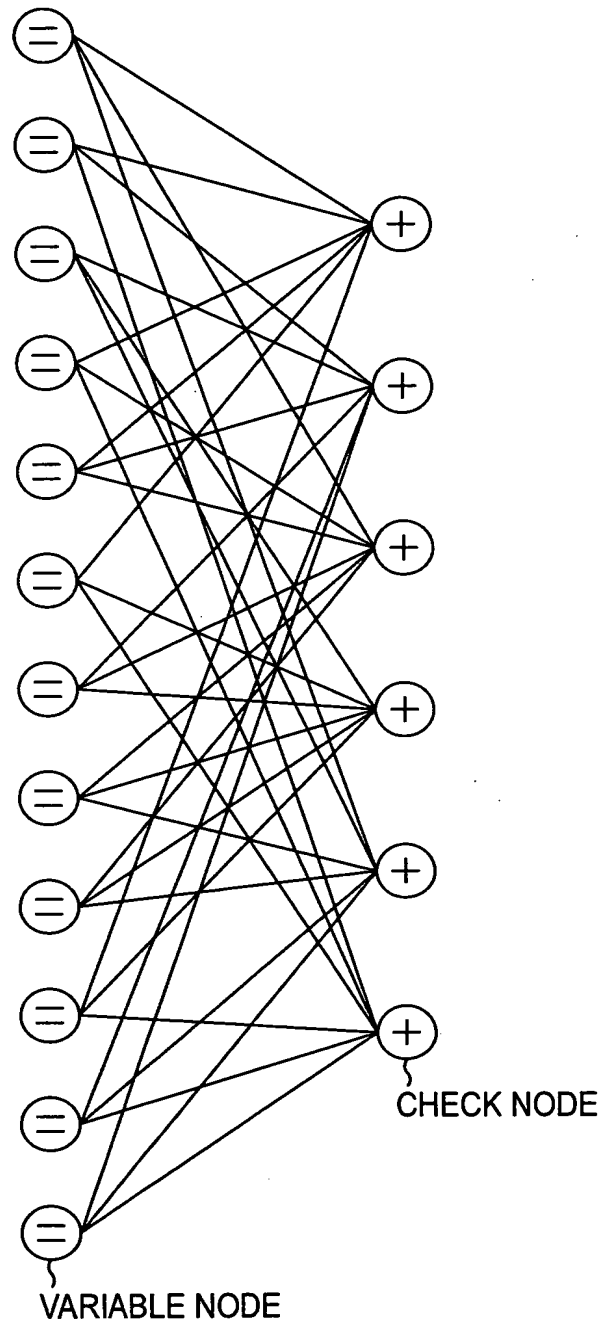




FIG. 5

$$H = \begin{bmatrix} 1 & 1 & 1 & 0 & 0 & 0 & 1 & 0 & 1 & 1 & 0 & 0 \\ 1 & 1 & 0 & 1 & 1 & 0 & 0 & 0 & 0 & 0 & 1 & 1 \\ 0 & 0 & 1 & 1 & 1 & 1 & 1 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & 1 & 1 & 0 & 1 & 1 & 0 & 0 & 1 \\ 1 & 1 & 0 & 0 & 0 & 1 & 0 & 1 & 0 & 1 & 1 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 1 & 1 & 1 & 0 & 1 & 1 \end{bmatrix}$$

FIG. 6



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FIG. 7

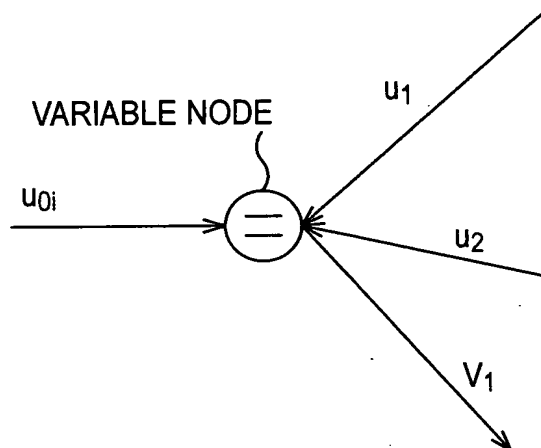


FIG. 8

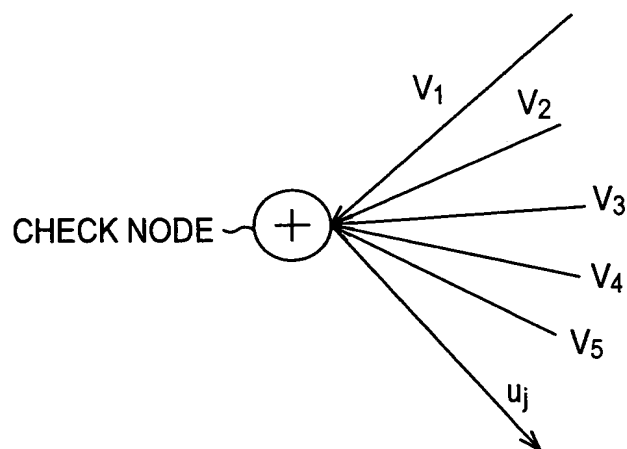


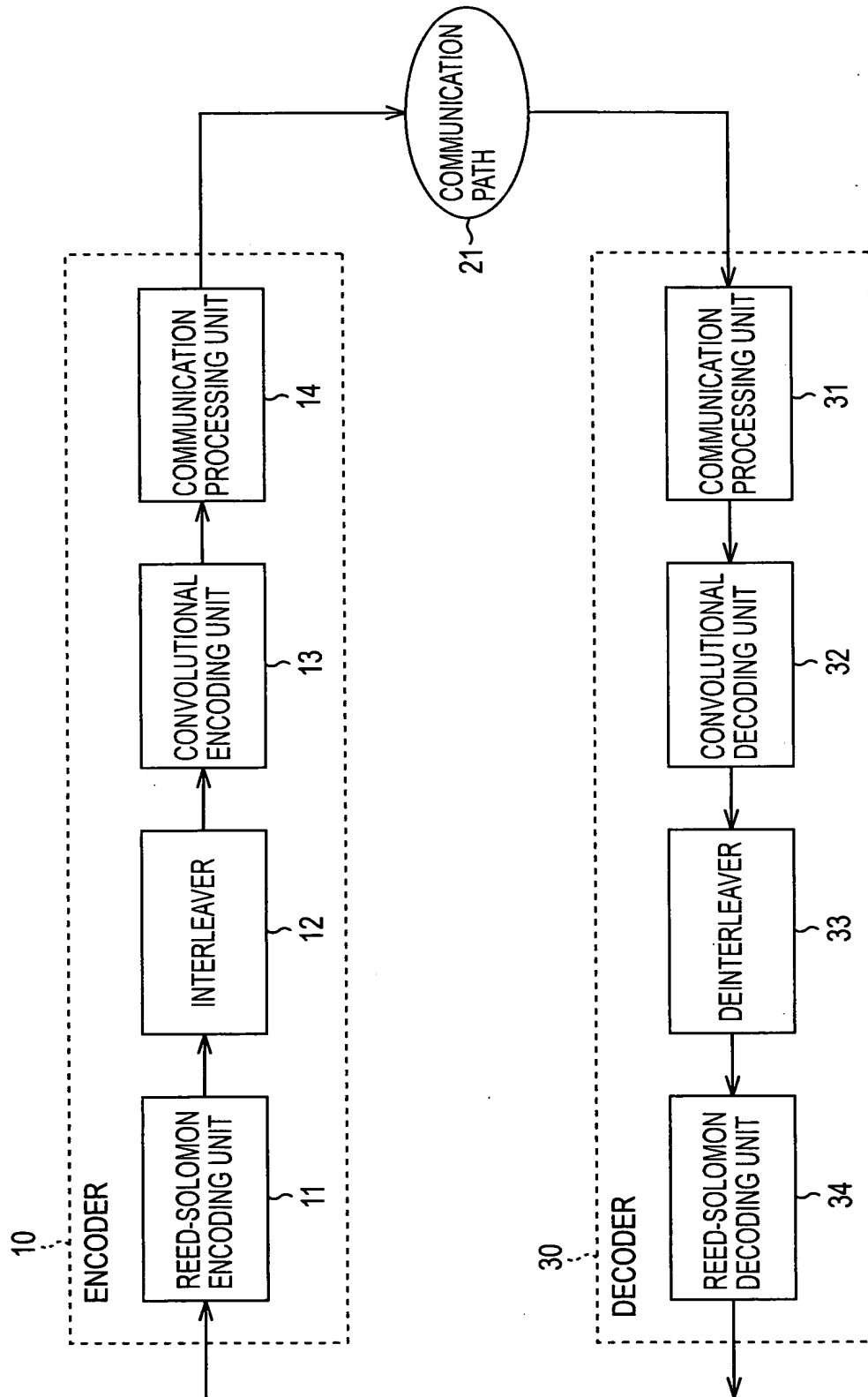
FIG. 9

$$H = \begin{pmatrix} 1 & 1 & 1 & \dots & 1 \\ 1 & \alpha & \alpha^2 & \dots & \alpha^{n-1} \\ 1 & \alpha^2 & \alpha^2 & \dots & \alpha^{2(n-1)} \\ \vdots & \vdots & \vdots & & \vdots \\ 1 & \alpha^{2-1} & \alpha^{2(2t-1)} & \dots & \alpha^{(2t-1)(n-1)} \end{pmatrix}$$



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FIG. 10



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FIG. 11

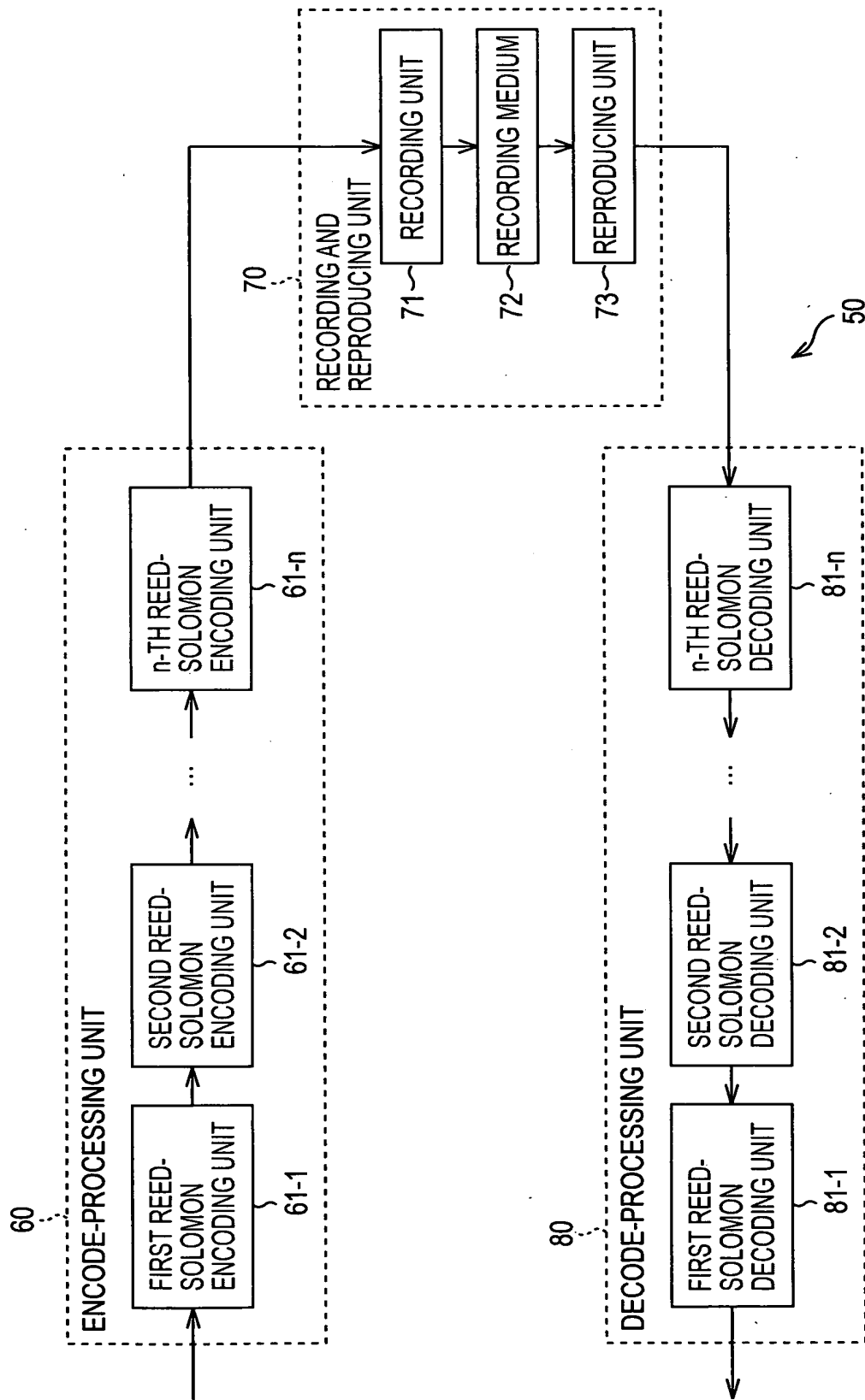
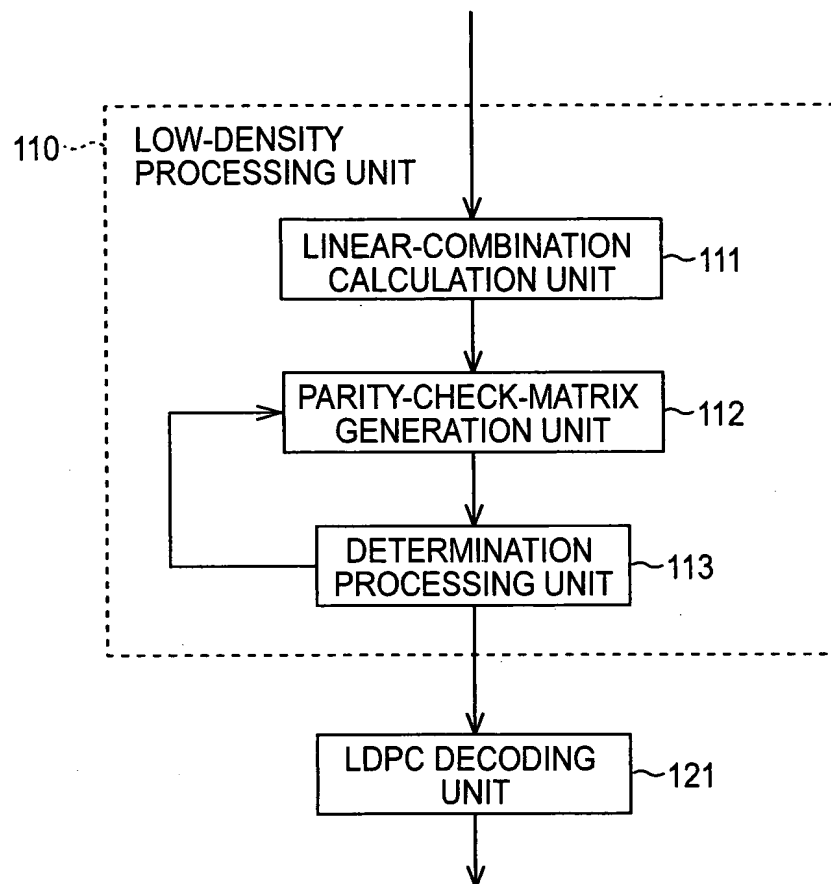


FIG. 12



↗  
100

FIG. 13

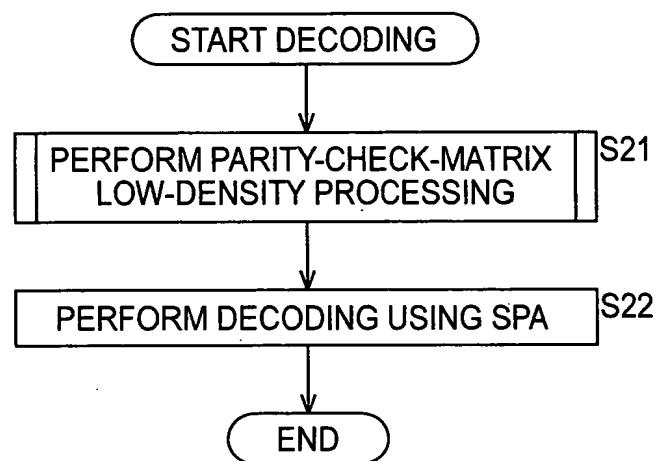


FIG. 14

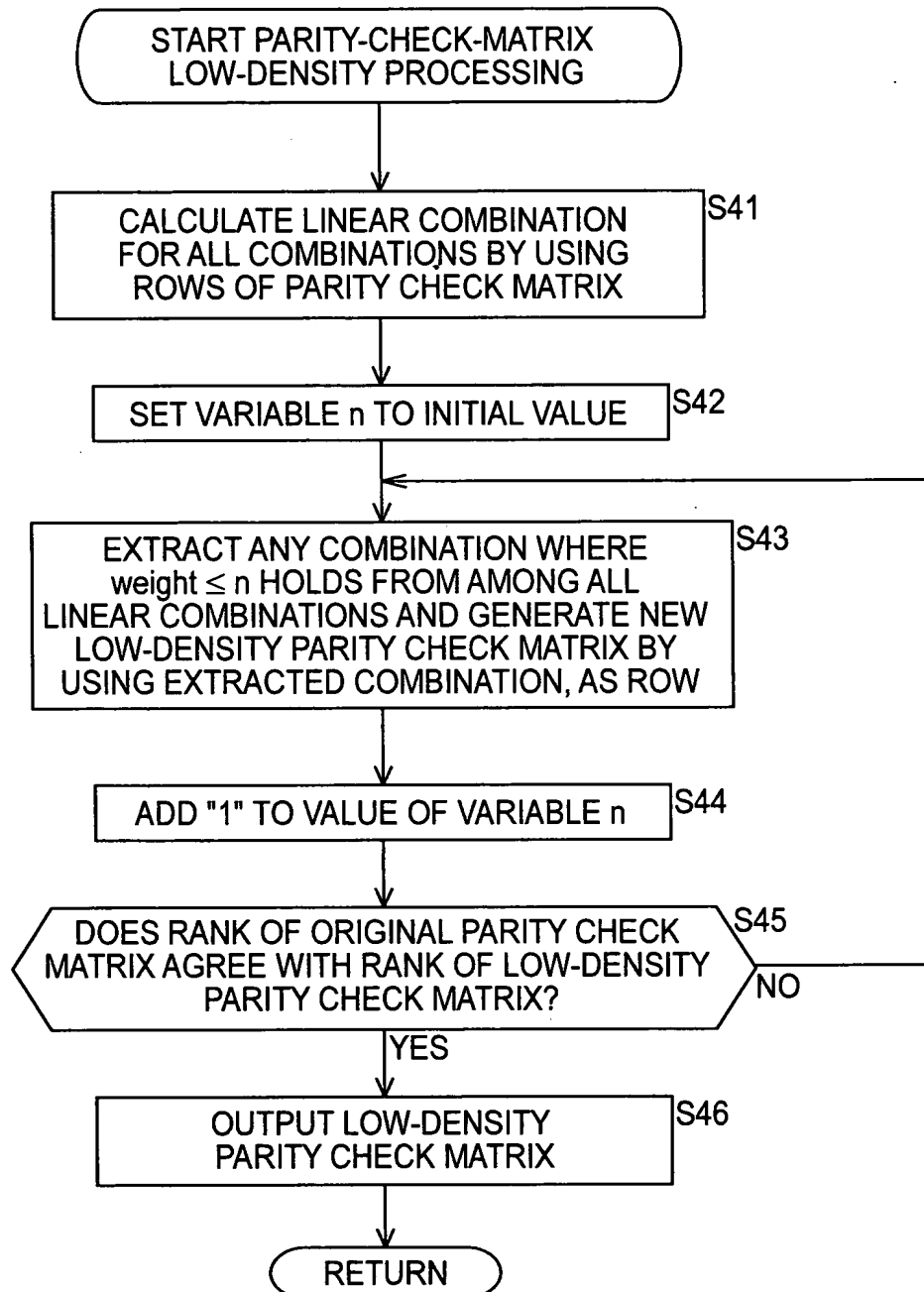


FIG. 15

$$H = \begin{pmatrix} 100010011010111 \\ 010011010111100 \\ 001001101011110 \\ 000100110101111 \\ 100011000110001 \\ 000110001100011 \\ 001010010100101 \\ 011110111101111 \end{pmatrix}$$

FIG. 16

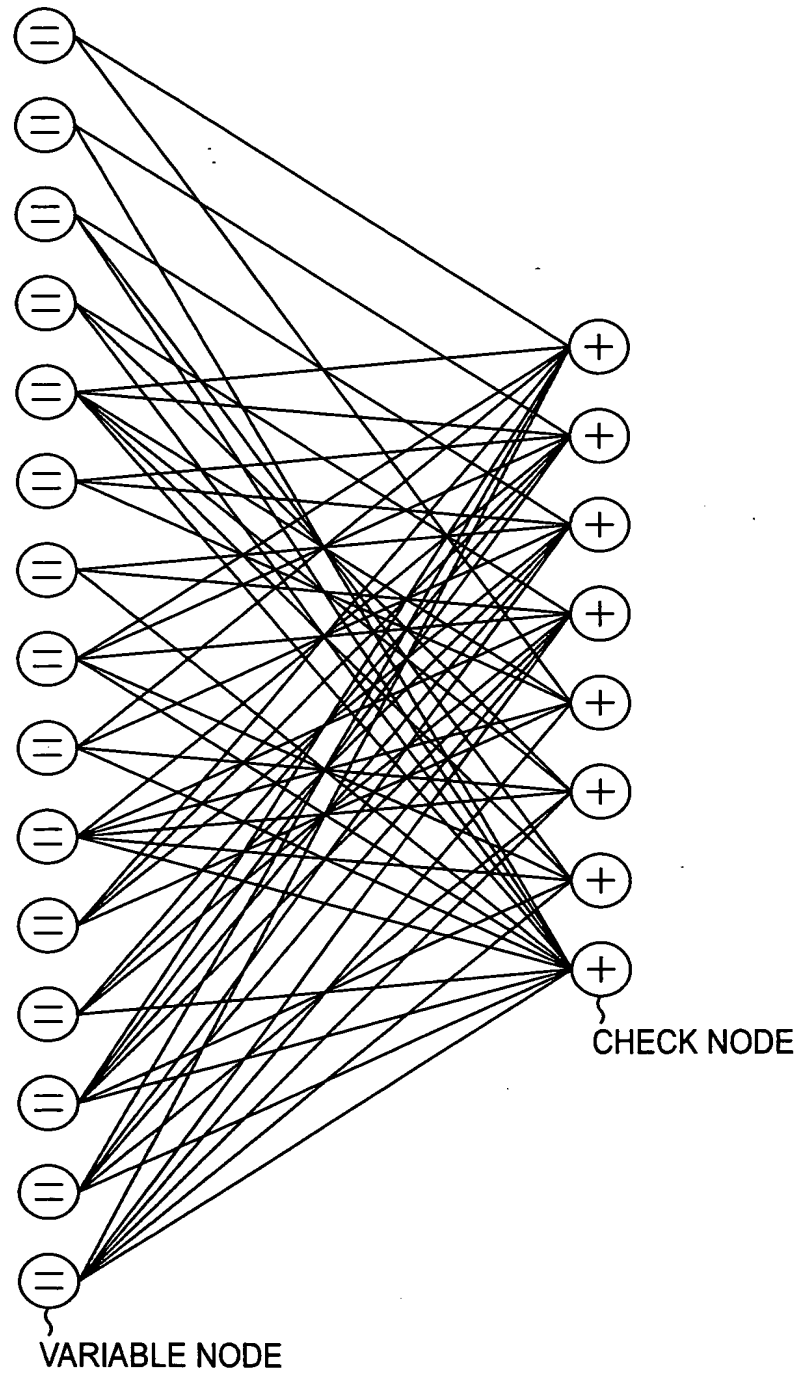


FIG. 17

HSP4=	100010000000110
	010001000000011
	101000100000001
	110100010000000
	011010001000000
	001101000100000
	000110100010000
	000011010001000
	000001101000100
	000000110100010
	000000011010001
	100000001101000
	010000000110100
	001000000011010
	000100000001101



FIG. 18

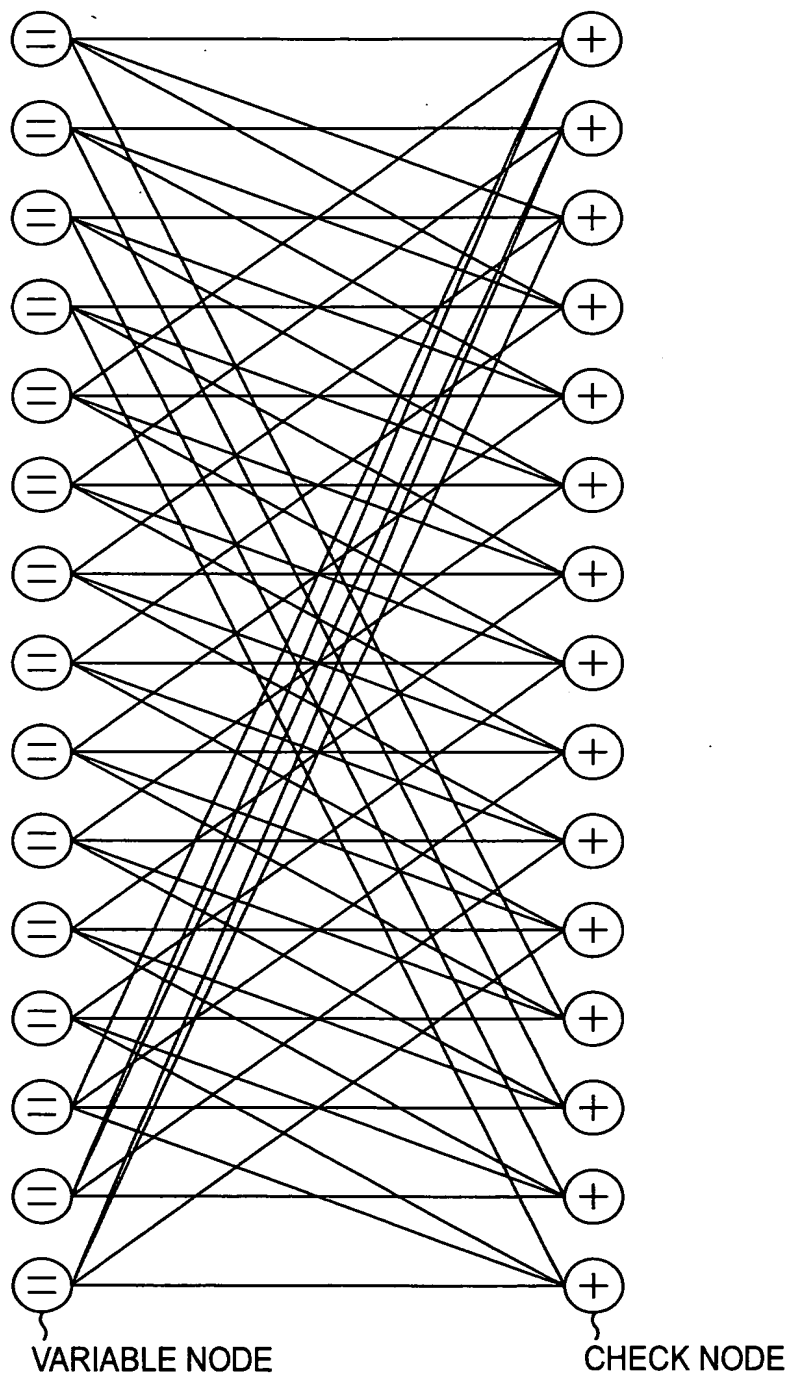


FIG. 19

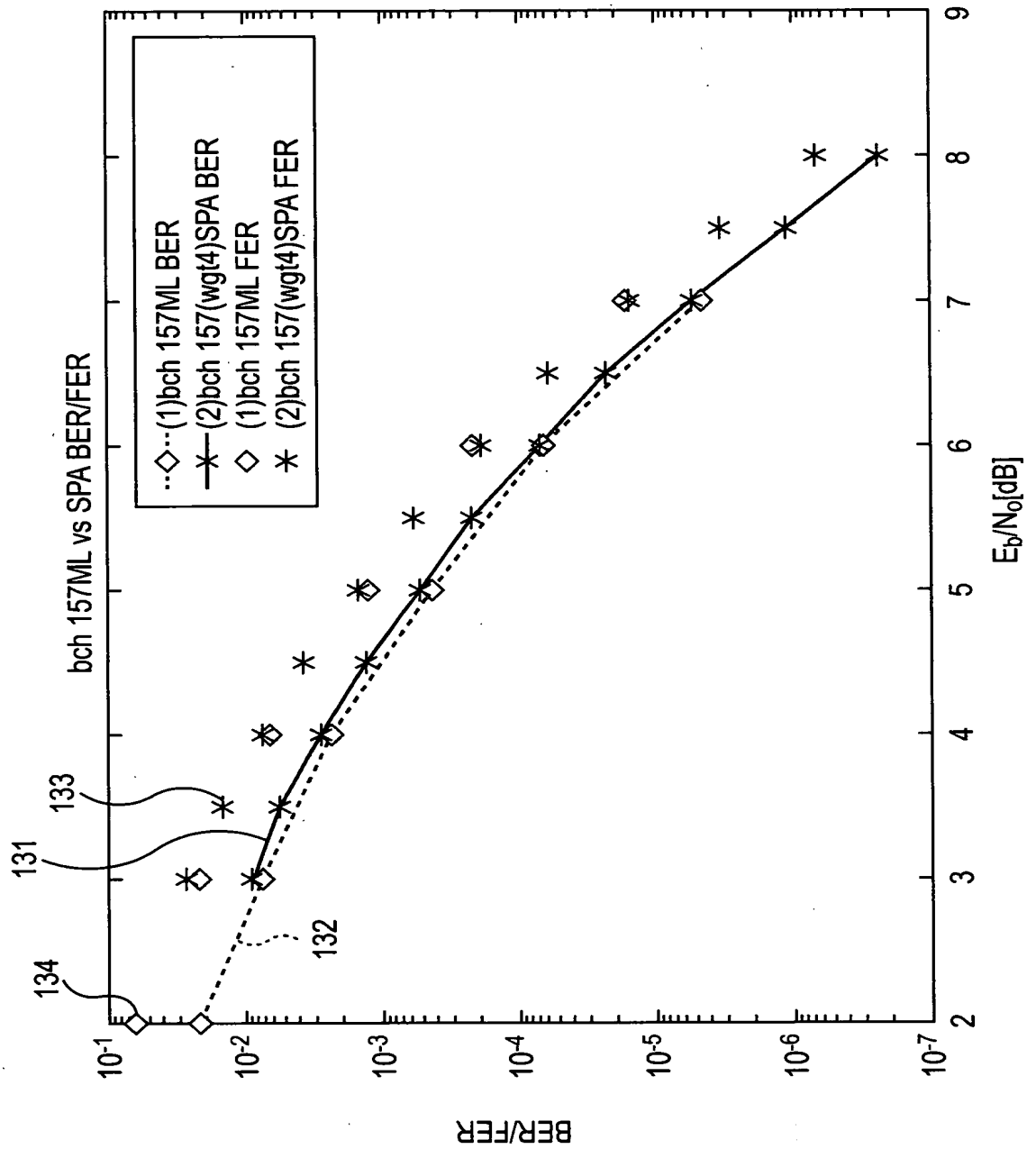


FIG. 20

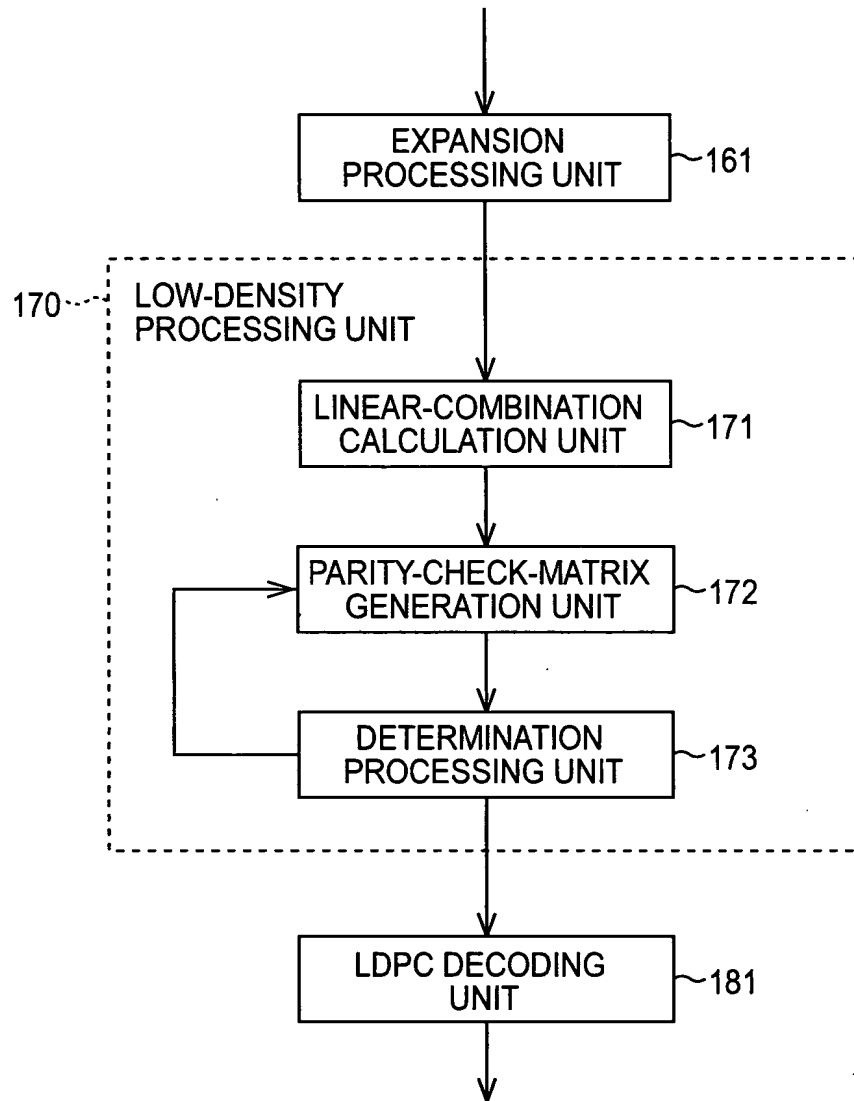


FIG. 21

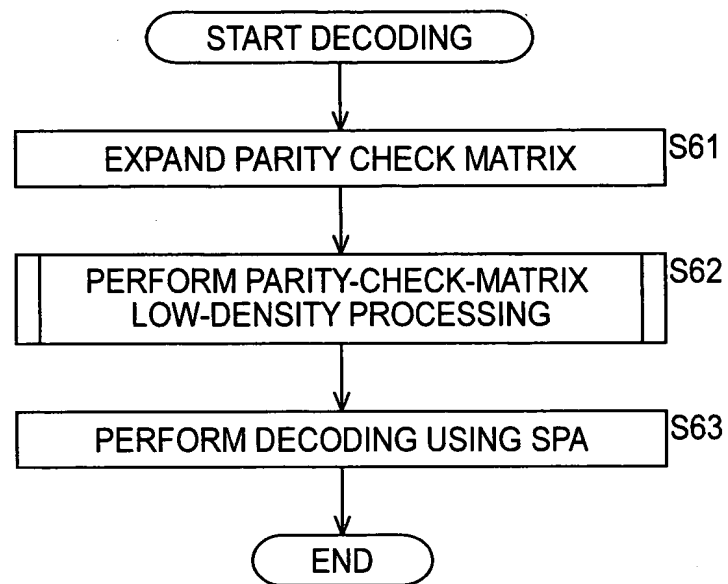


FIG. 22

$$H = \begin{pmatrix} 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 & 1 \\ 1 & \alpha & \alpha^2 & \alpha^3 & \alpha^4 & \alpha^5 & \alpha^6 & \alpha^7 & \alpha^8 & \alpha^9 & \alpha^{10} & \alpha^{11} & \alpha^{12} & \alpha^{13} & \alpha^{14} & \alpha^{15} & \alpha^{16} & \alpha^{17} \\ 1 & \alpha^2 & \alpha^4 & \alpha^6 & \alpha^8 & \alpha^{10} & \alpha^{12} & \alpha^{14} & \alpha^{16} & \alpha^{18} & \alpha^{20} & \alpha^{22} & \alpha^{24} & \alpha^{26} & \alpha^{28} & \alpha^{30} & \alpha^{32} & \alpha^{34} \\ 1 & \alpha^3 & \alpha^6 & \alpha^9 & \alpha^{12} & \alpha^{15} & \alpha^{18} & \alpha^{21} & \alpha^{24} & \alpha^{27} & \alpha^{30} & \alpha^{33} & \alpha^{36} & \alpha^{39} & \alpha^{42} & \alpha^{45} & \alpha^{48} & \alpha^{51} \end{pmatrix}$$

[illegible]

FIG. 24

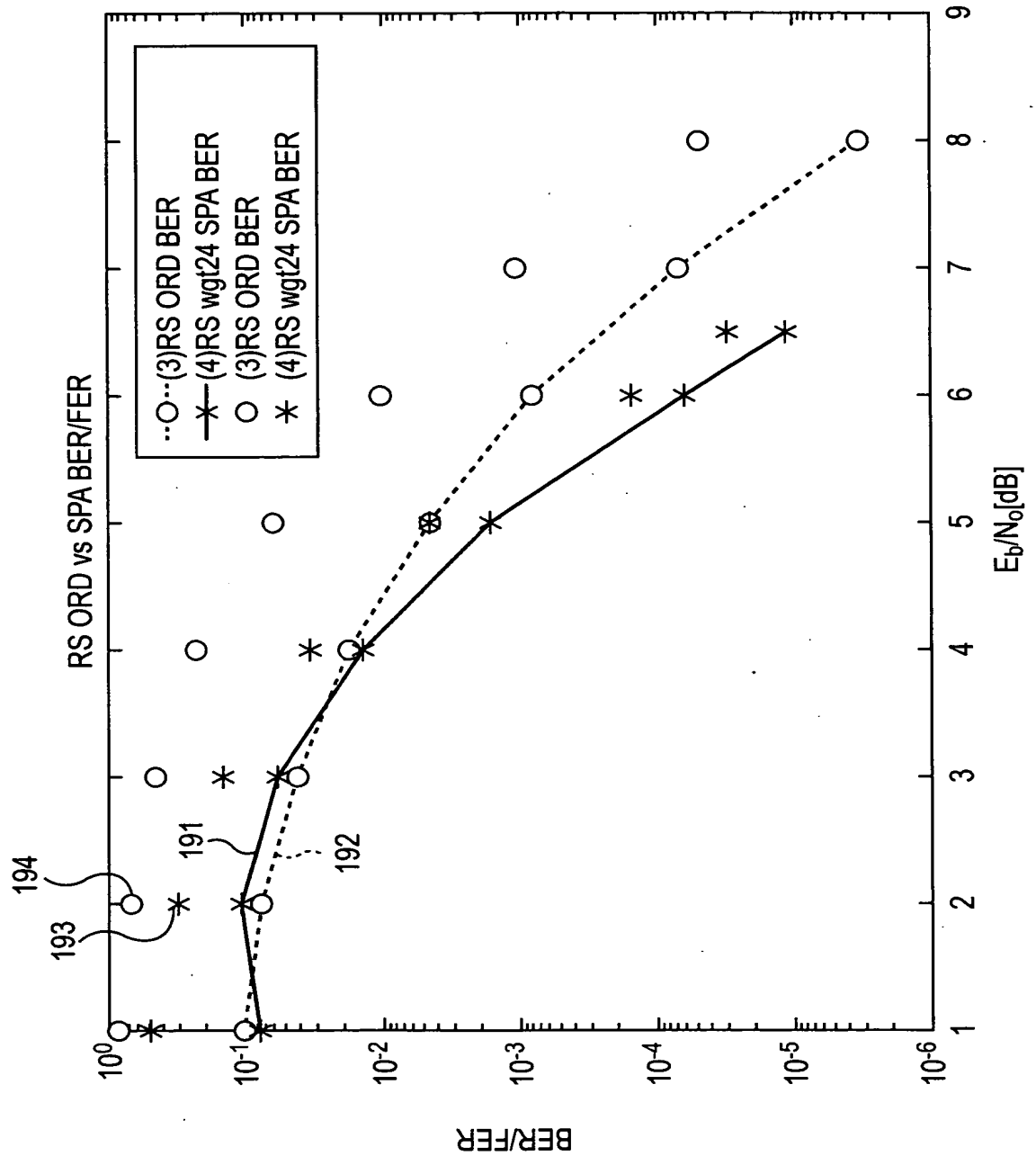


FIG. 25

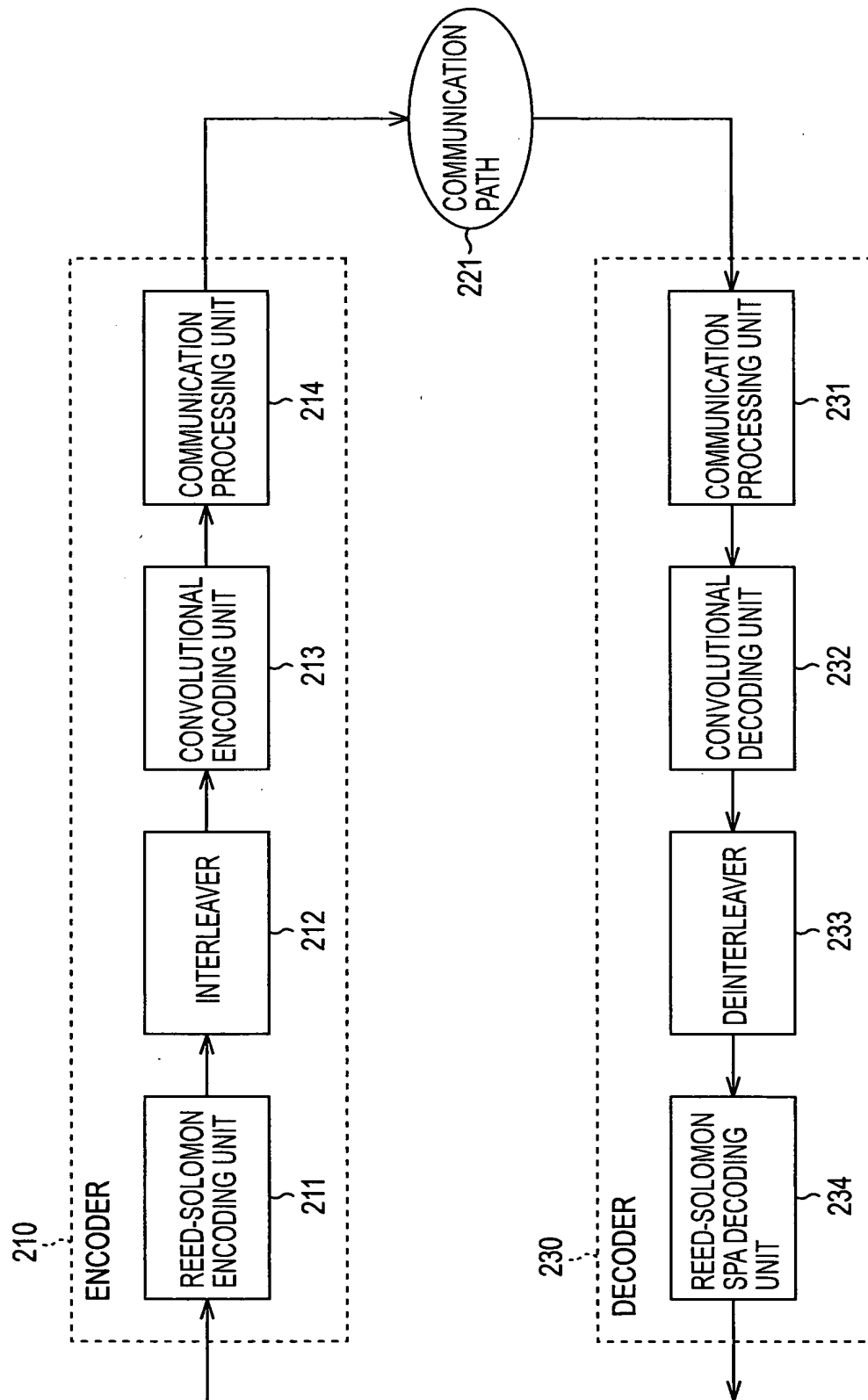




FIG. 26

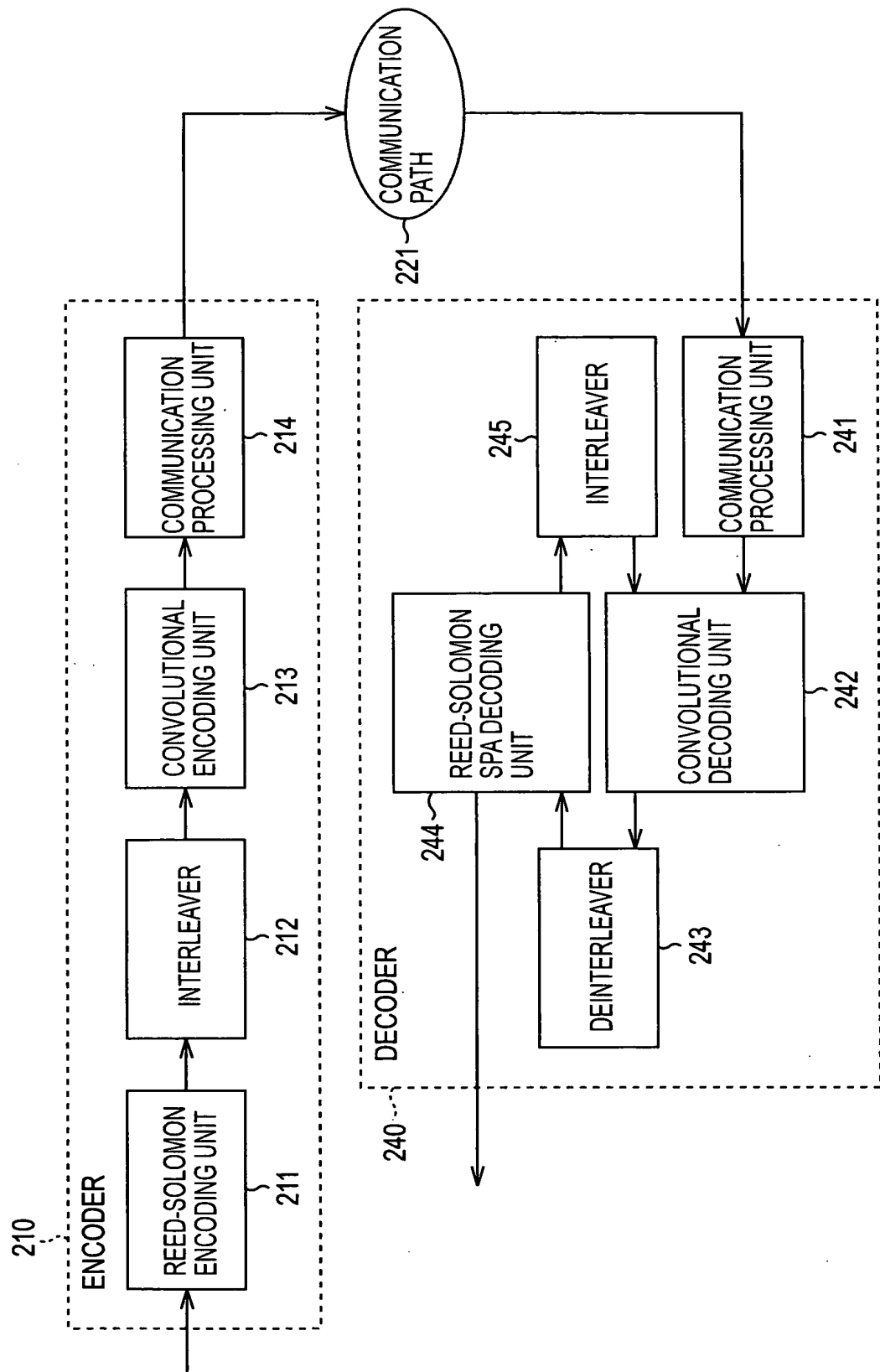
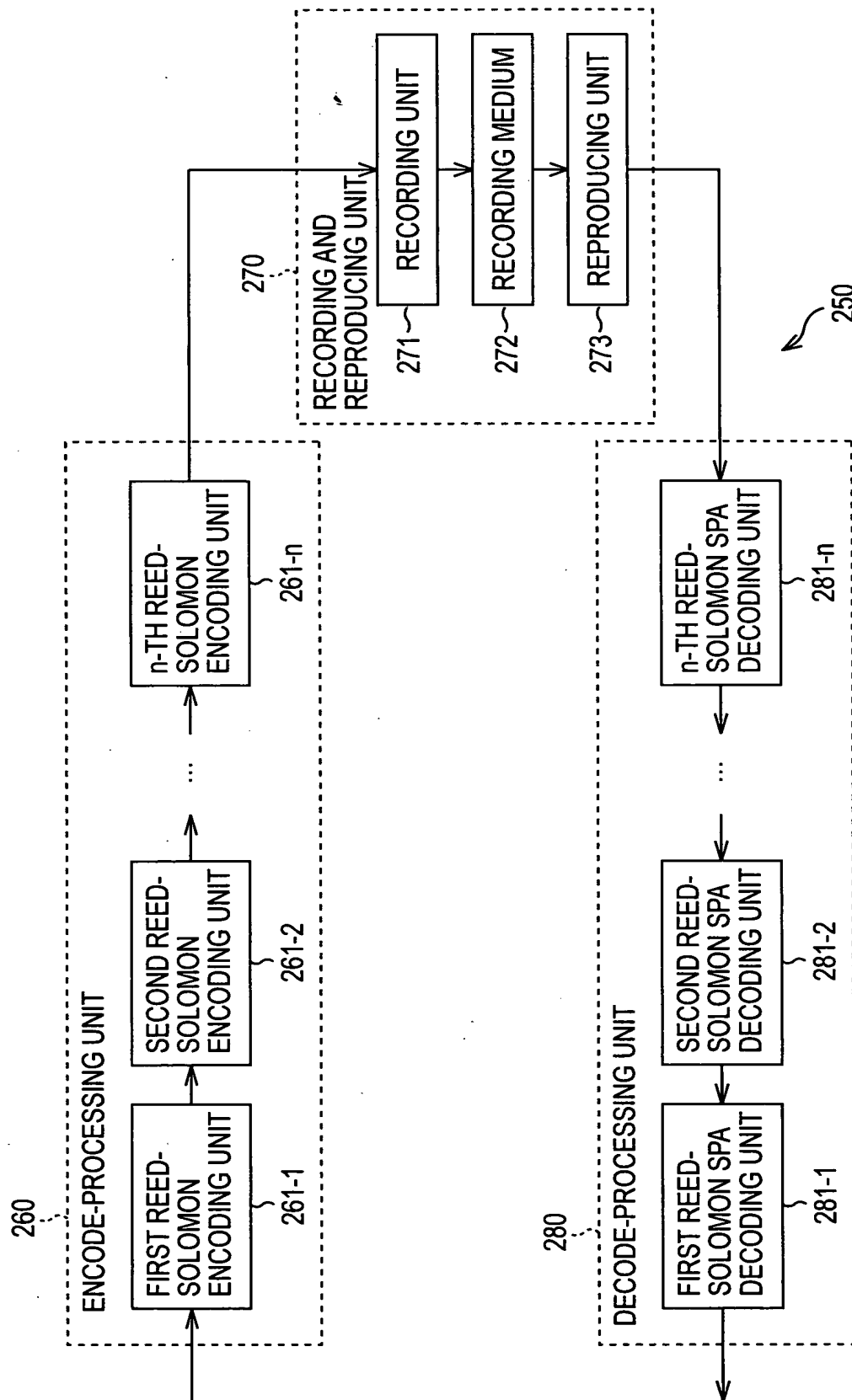
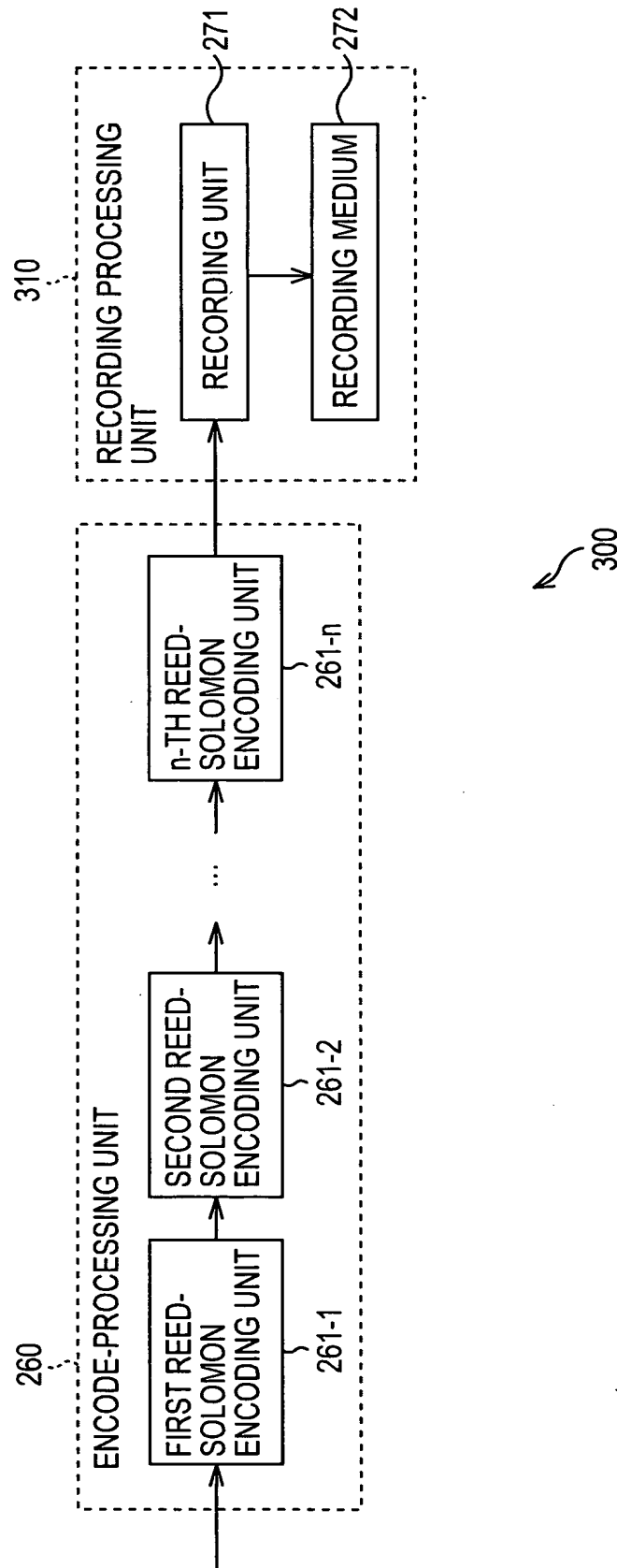


FIG. 27



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FIG. 28



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FIG. 29

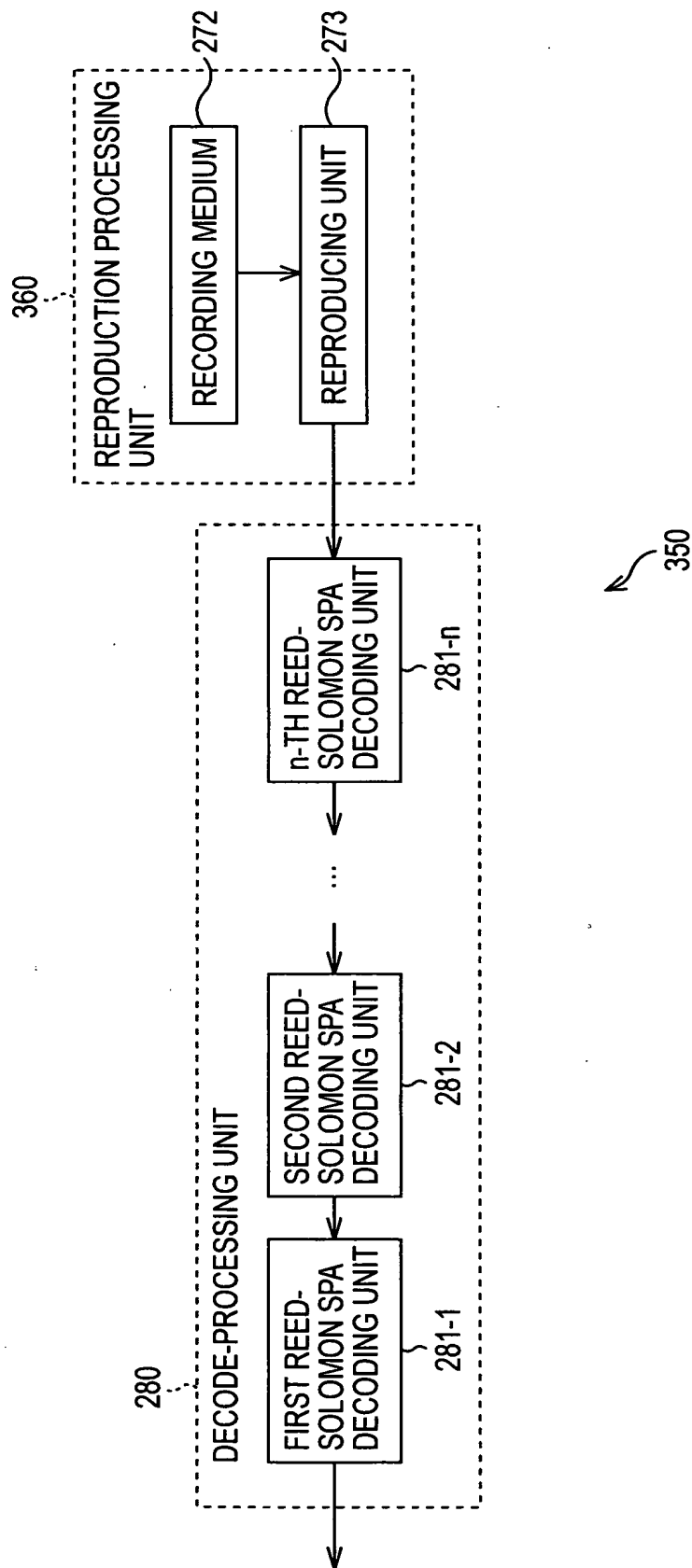


FIG. 30

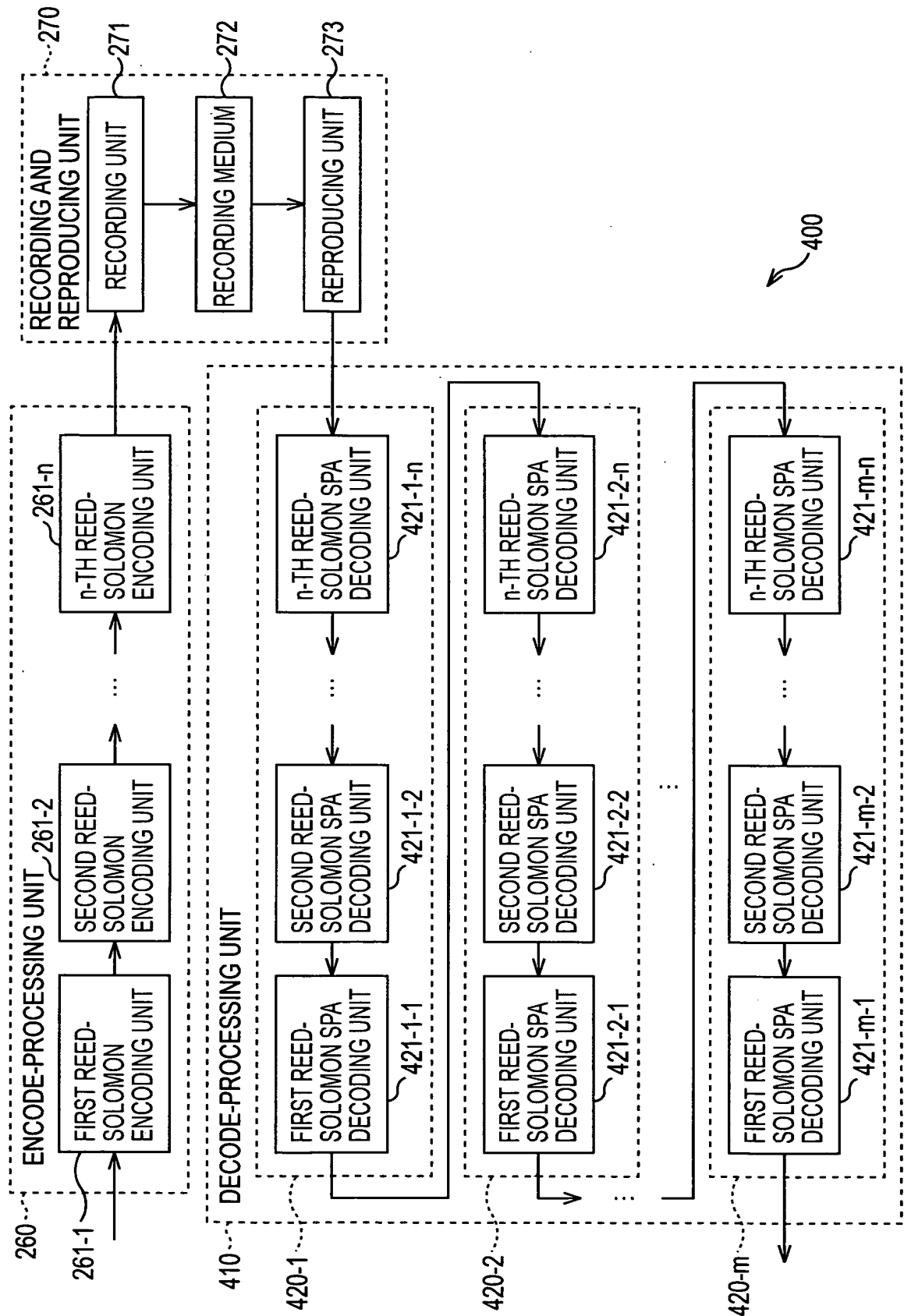


FIG. 31

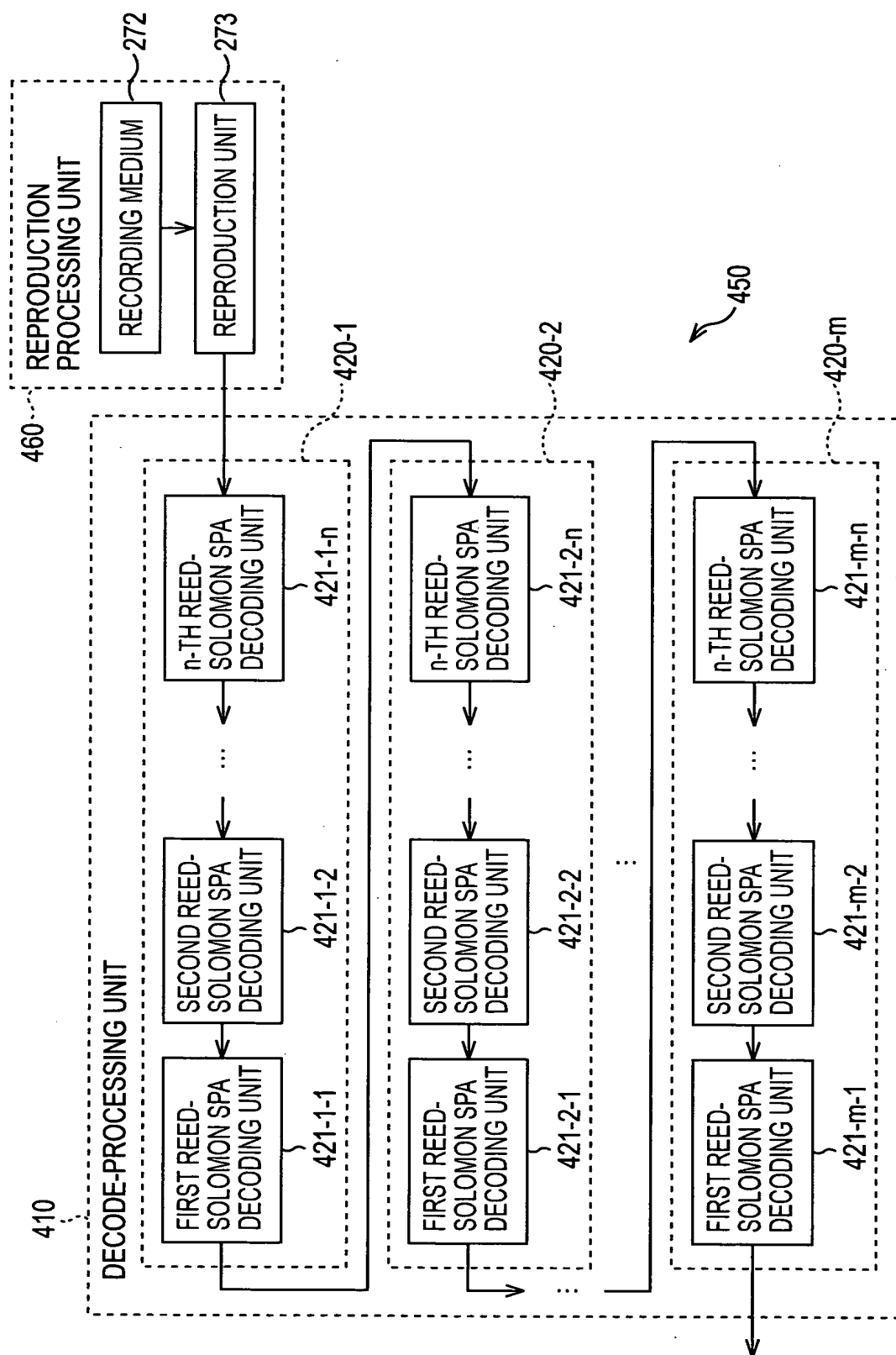


FIG. 32

